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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/673,168	11/28/2000	Roald Skurtveit	NIDN-10370	2221	
22840 75	590 06/04/2003				
AMERSHAM BIOSCIENCES			EXAMINER		
PATENT DEPARTMENT 800 CENTENNIAL AVENUE			SHARAREH, S	SHARAREH, SHAHNAM J	
PISCATAWAY	(, NJ U8833		ART UNIT	PAPER NUMBER	
			1617	10	
			DATE MAILED: 06/04/2003	12	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	09/673,168	SKURTVEIT ET AL.	
Offic Acti n Summary	Examiner	Art Unit	
	Shahnam Sharareh	1617	
The MAILING DATE f this communication ap Period for Reply	pears on the cover sheet with	the correspondenc address	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).  Status	136(a). In no event, however, may a repoly within the statutory minimum of thirty (will apply and will expire SIX (6) MONTHE, cause the application to become ABA	oly be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).	
1)⊠ Responsive to communication(s) filed on 04	March 2003 .		
· · · <u> </u>	his action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice under	rance except for formal matte		
Disposition of Claims			
4)⊠ Claim(s) <u>1-20 and 23-25</u> is/are pending in the	• •		
4a) Of the above claim(s) is/are withdra	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-20, 23-25</u> is/are rejected.		•	
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	or election requirement.		
Application Papers			
9) The specification is objected to by the Examine		- Francis an	
10) The drawing(s) filed on is/are: a) acce	•		
Applicant may not request that any objection to the 11) The proposed drawing correction filed on			
If approved, corrected drawings are required in re		approved by the examiner.	
12) The oath or declaration is objected to by the Ex	• •	·	
Pri rity under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreig	n priority under 35 H.S.C. &	119(a)-(d) or (f)	
a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 65 6.6.6.	110(4) (4) 61 (1).	
1. Certified copies of the priority document	ts have been received		
2. Certified copies of the priority document		plication No	
3. Copies of the certified copies of the prio application from the International But See the attached detailed Office action for a list	ority documents have been re ureau (PCT Rule 17.2(a)).	eceived in this National Stage	
<ul><li>14) ☐ Acknowledgment is made of a claim for domest</li><li>a) ☐ The translation of the foreign language pro</li></ul>		•••	
15) Acknowledgment is made of a claim for domest			
Attachment(s)		g .—- and or 121,	
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Info	mmary (PTO-413) Paper No(s)  prmal Patent Application (PTO-152)	

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#### **DETAILED ACTION**

1. Amendment filed on March 04, 2003 has been entered. Applicant's election with traverse of phosphatidylserine-stabilized perfluorobutane and sodium dodecyl sulphate in Paper No. 9B has been acknowledged. The search is directed to the elected species and their respective subgenus of phospholipids and alkyl sulphates. Any rejection that is not addressed in this Office Action is considered obviated in view of the amendments.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### Claim Rejections - 35 USC § 112

2. Claims 1, 5 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recitation of "an initially coalescence-resisting surface membrane,.." renders the scope of the claim ambiguous. It is not clear what compounds encompass "an initially coalescence-resisting surface membrane." Applicant's argument with respect to this rejection is not persusive. Applicant argues that the instant application defines this term by reference to WO-A-8002365. Applicants are reminded that the test under 35 USC 112 is not whether another publication provides an example of the term at issue; rather, whether one of ordinary skill in the art can reasonable ascertain the scope of the claim by clearly defining the metes and bounds of its limitations. Here, the application does not incorporate WO-A-8002365 in its entirety, nor does the specification specify the meaning of such limitation.

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Furthermore, the incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973). No such declaration is provided here. Therefore, the claim stand rejected.

# Double Patenting

- 3. Claims 1-20, 23-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of U.S. Patent No. 6,375,931. Applicant argues that the US 6,375,931 does not suggest that its claimed material can be co-administered as a separate component in order to promote microbubble growth by destabilizing the microbubble dispersion.
- 4. This argument is not persuasive, because the instant claims appear to be drafted in the form of product-by-process claims. Accordingly, product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113.) "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in

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the product - by - process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). Thus, the argument that the instant material can be co-administered separately does not render the instant products patentably distinct.

As reasoned in previous Office Action, it would have been obvious to one of ordinary skill in the art at the time of invention to practice the instantly claimed invention, because all the pending claims use the same diffusible components thus providing the similar effects as of the diffusible components of the patented claims. Therefore, claims stand rejected.

# Claim Rejections - 35 USC § 102

- 5. Claims 1-13, 15-19, are rejected under 35 U.S.C. 102(e) as being anticipated by Unger US Patent 5,846,517(Unger I).
- 6. Applicant's arguments have been fully considered but are not found persuasive.

  Applicant argues that Unger I does not disclose administration of destabilizing substances to promote controlled growth of microbubbles to effect their temporary retention in the tissue microvasculature.
- 7. First, with respect to claims 1-16 Examiner replies that such claims are product claims. Unger teaches all elements of such product claims. Namely, Unger uses compositions containing polyethylene glycol and sodium lauryl sulfate (col 27-29). Thus, Unger teaches the use of instantly claimed destabilizing substances set forth in claim 12. subsequently, Unger is anticipating all limitations of the instant product claims.

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8. With respect to product claims 17-20, 23-25, Unger discloses process steps of co administering compositions having all elements of the instant claims. Thus, compositions of Unger are inherently capable of the growth and retention within the tissue microvasculature of interest when subject to ultrasound energy. Applicant's methodologies does not exclude process steps of Unger. (abstract; col 49-line 55, col 50-line67; examples 1-4; col 55, lines 1-30). Therefore, Unger's methods anticipates the limitations of the instant claims. Accordingly, Unger anticipates the limitations of the instant claims.

9. Claims 1-12, 15-18, 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Unger US Patent 5,733,572 (Unger II).

Applicant's arguments with respect to this rejection have been fully considered but are not found persuasive. Applicant argues that the compositions of Unger II are adapted for therapeutic use not ultrasound contrast agents.

In response Examiner states that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Unger provides for all elemental limitations of the instant claims. Thus, it is anticipatory for the reasons of record.

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10. Claims 1-20, 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Ostensen et al US Patent 6,375,931 (Ostensen).

Applicant's arguments are not found persuasive. Applicant argues that

Ostenson's substances may not be separately administered. In response, Examiner
states that Ostenson's discloses same components as instantly claimed. Further

Ostenson's components are separately packaged. Therefore, the meet all the limitations
of the instant claims. The components of Ostenson inherently possess all
characteristics of the instant components. Thus, claims stand rejected for the reasons of
record.

### Claim Rejections - 35 USC § 103

Claims 1-20, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger II.

In response to applicant's argument that Unger does not use the claimed material as a separately administrable substance, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Here, Unger teaches all components and method steps instantly claimed. Unger only fails to use adenosine as a vasodilator, however, as reasoned in previous Office Action, any cardiac drug may be used in combination with Unger's compositions for their own intended clinical end point. Moreover, Applicant has not provided any

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evidence showing that the components of Unger is indeed not capable of being administered separately. Thus, the claims stand rejected for the reasons of record.

#### Conclusion

No claims are allowed. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS**MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahnam Sharareh whose telephone number is 703-306-5400. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, PhD can be reached on 703-308-1877. The fax phone numbers for the organization where this application or proceeding is assigned

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are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1123.

ss June 1, 2003

RUSSELL TRAVERS PRIMARY EXAMINER GROUP 1200

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